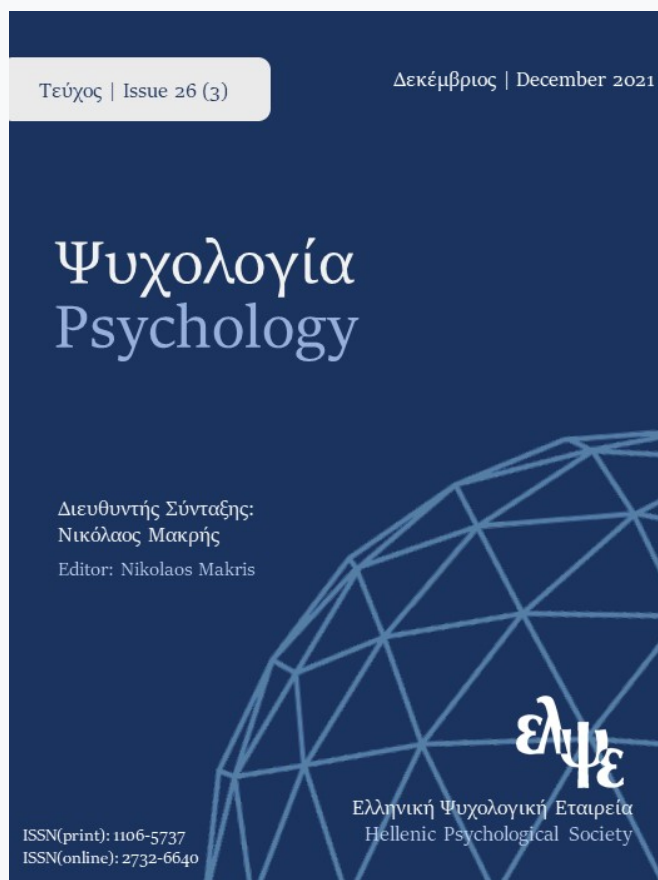


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## ΕΜΠΕΙΡΙΚΗ ΕΡΓΑΣΙΑ | RESEARCH PAPER

# Authoritarianism, prejudice and COVID-19: the moderating role of cultural liberalism

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## KEYWORDS

COVID-19,  
cultural liberalism,  
ideological level,  
prejudice,  
right-wing authoritarianism,  
threat

## ABSTRACT

The COVID-19 pandemic has posed an enormous challenge in medical, economic, and political terms during the past months. The threat of disease, the more or less authoritarian biopolitics of the states, the concept of social distancing, dictate the need to examine the consequences of the pandemic on an ideological level. Making use of data collected before the pandemic ( $N = 82$ ) as a point of reference, the aim of the present study was to test the hypothesis that right-wing authoritarianism (Authoritarianism – Conservatism – Traditionalism; ACT; Duckitt et al., 2010) increases under conditions of threat salience (Adorno et al., 1950; Sales, 1973), while appraising the possible moderating role of cultural liberalism. Furthermore, the hypothesis that threat predicts prejudice (e.g., Florack et al., 2003) was examined. Data were collected during three phases of the pandemic in Greece: the first weeks ( $N = 85$ ), the lockdown ( $N = 131$ ) and the lifting of the lockdown measures ( $N = 126$ ). Results confirmed our hypotheses. An increase was found in Conservatism and Traditionalism, especially among less liberal participants, whereas more liberals appeared to express reduced levels of right-wing authoritarianism during the lifting of lockdown measures compared to the pre-COVID-19 period. A progressive expression of prejudice was also found, with cultural liberalism playing a limited but still moderating role in all three phases. Implications of the pandemic for the ideological level are discussed.

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## Introduction

A strong link between threat and right-wing political attitudes, such as authoritarianism and prejudice, has been proposed by many researchers. Studies have shown that people who see the world as dangerous and threatening express higher levels of Right-Wing Authoritarianism (Altemeyer, 1996; Duckitt, 2001). It has been supported that threat causes the adoption of higher levels of authoritarian attitudes (e.g., Duckitt, 1989), whereas other researchers have argued that people who already have authoritarian dispositions seem to be more “sensitive” in perceiving threats and react in a more authoritarian way (e.g., Feldman, 2003).

Regarding the relationship between threat salience and prejudice, it is widely accepted that xenophobia can occur among people who perceive themselves to be vulnerable to infection (Faulkner et al., 2004; Fessler et al., 2005), as a “behavioral immune system” drives people to avoid disease-causing

pathogens as well as possible carriers of pathogens (Neuberg et al., 2011; Schaller, 2011; Schaller & Duncan, 2007; Schaller & Park, 2011). In addition, Tybur et al. (2016), while investigating the relationship between pathogens and politics, found that national parasite stress, which refers to nations with greater infectious disease burdens, relates to traditionalism, an aspect of conservatism related to adherence to group norms. However, the impact of disease-avoidance processes is not limited to groups that are supposed to fetch an increased risk of infection, but it seems to be directed against a wide range of people, especially those under a high salience of threat (Schaller & Neuberg, 2012).

In addition to the impact of disease threat on intergroup relations, several psychological variables, such as death anxiety, fear of threat and loss, and system instability, seem to predict political conservatism (Jost et al., 2003). Therefore, there is plenty of evidence suggesting that the threat of disease, which has become particularly salient with the outbreak of the COVID-19 pandemic, is expected to have significant implications for the ideological and intergroup level. Another type of social automatism seems to be emerging, in view of the "reflexes" of the media, the biopolitical strategies adopted by the authorities, as well as the citizens' orientation on the axis of individual and collective responsibility. The pandemic has brought life and death issues to the forefront of social, political and ideological conflict, referring more strongly than ever to the genesis of biopolitics, as Foucault historically outlines in his 1978-79 lectures at the Collège de France (Foucault, 2008). The politicization of biological life, the role of medicine, control of disease, repression and interventions in the private sphere, that aim to form a biopolitical governance which increases productivity, are elements that testify to the ideological implications and complications that the COVID-19 pandemic is expected to effectuate. In a more controversial direction, Agamben (2020), who likens science to religion and scientists to prophets, observes that recent restrictive measures are transforming every individual into a potential contaminant, just as every citizen was considered a potential terrorist, and refers to the Nazis' transformation of biopolitics into thanatopolitics. It seems, therefore, that the effects of the pandemic on the ideological level stem not only from the threat itself, but also from the adoption of more or less authoritarian biopolitics, which is presented and consequently internalized as vital, thus increasing the risk of stigmatizing specific social groups, such as students, the elderly and the financially weakest.

### ***Authoritarianism and Threat***

The dominant approach of right-wing authoritarianism studies it as a one-dimensional personality structure, which includes elements of authoritarian submission, authoritarian aggression and conventionalism (Altemeyer, 1981). Duckitt et al. (2010) extend this approach, clearly defining these three dimensions as Authoritarianism, Conservatism and Traditionalism, treating them as structures of ideological behavior. These expressions could be seen as strategies for achieving collective security at the expense of individual autonomy (Duckitt et al., 2010) and they can be considered independent, but do not cease to be related to each other.

During the COVID-19 pandemic, both the authorities and the media place particular emphasis on restricting individual freedoms for the sake of achieving social security. This disproportionate emphasis, however, becomes apparent especially when contrasted with the authorities' inability or unwillingness to strengthen the national health system and social welfare. Consequently, there is a tendency on the part of citizens to adopt a role of "inspector" regarding the discipline of specific social groups. Therefore, the introduction of authoritarianism is purposefully chosen in the context of studying the effect of threat on the ideological level, as behind it lies the suppression of the threat.

However, beyond the widely accepted theoretical and empirical association between threat and authoritarianism, the crucial questions are whether it is a causal relationship and, if so, what is the type of this relationship (Feldman, 2013). It has been suggested that environmental threat is a major cause of high authoritarianism, referring, as Sales (1973) notices, either to the impact of threatening family

environments (e.g., Adorno et al., 1950) or to the salience of threat within current situations (e.g., Rokeach, 1960). Duckitt (2013) highlights that, although there is no empirical evidence supporting the view that authoritarianism is a defensive reaction to the psychological threat and anxiety deriving from inner and psycho-dynamic conflicts (Adorno et al., 1950; Allport, 1954), yet the hypothesis that authoritarianism levels increase under high threat salience has been supported by cross-sectional case studies and longitudinal studies (Doty et al., 1991; Sales, 1973; Sibley et al., 2007). According to this approach, the COVID-19 pandemic should cause a noticeable increase of authoritarianism.

An interaction model has also been suggested (Feldman, 2003; Feldman & Stenner, 1997); people high in authoritarianism seem to be more sensitive in perceiving threat. In this case, threat activates the consequences of authoritarianism, such as prejudice, intolerance and punitiveness (Feldman, 2013). In this respect, the threat of COVID-19 disease is expected to cause an increase of authoritarian and prejudicial attitudes, only among individuals with authoritarian predisposition. In particular, Feldman (2013) argues that the conflict between the values of social conformity and personal autonomy underlies authoritarian predispositions. In the present study, it is supported that liberalism is associated this conflict, as it pertains to contemporary stakes and social debates that concern today's social movements. Besides, the term "liberalism" exists in political and social theory, as well as in social psychology of attitudes. In particular, classical liberalism describes a political and an economic school of thought, whereas modern liberals further support issues such as civil rights, women's rights, multiculturalism, criminal rights and environmental protection (Carlisle, 2005). In addition, Jacoby (1995) found that people apply a liberal-conservative continuum when making political judgments, while Eagly and Chaiken (1998) argue that clusters of attitudes and beliefs, that is, ideologies, are organized among a dominant societal theme such as liberalism and conservatism. Cohrs and Ibler (2009) have also stated that threat interacts with authoritarian disposition in causing perceived threat and, by extension, authoritarian reactions, whereas Hastings and Shaffer (2008) made a seemingly extreme assumption, suggesting that under conditions of severe threat *all* individuals would demonstrate authoritarian behaviors, as authoritarianism is a generally adaptive function.

### ***Threat and the behavioral immune system***

Terror management theory suggests that the feeling of threat arises as a result of disputing our worldview and, in a deeper level, as an insult to our self-esteem (Greenberg et al., 1986). Terror management presupposes the salience of mortality<sup>1</sup>, however, even though not all types of threat are directly related to mortality, disputing the way we perceive the world is a potential threat -realistic or symbolic- of our being.

Evolutionary models of social cognition have been able to interpret a wide range of findings regarding the links between motivation, cognition and behavior, helping to document the existence of two distinct systems; the self-protection system and the disease avoidance system (Neuberg et al., 2011). Basic functions of the self-protection system are the detection of features which indicate the possibility of intentional damage, as well as the cognitive and emotional response of fear. Fear facilitates the distance from this threat and leads to a specific form of prejudice, which is addressed to individuals or factors that activate this system (Schaller & Neuberg, 2008).

In addition to the immediate threat of violent, physical harm, other people are perceived as an indirect threat in the transmission of disease. To manage this type of threat, the evolution of a *behavioral immune system* is observed, with a basic function to avoid infection from the beginning (Neuberg et al., 2011). This disease avoidance system, which is expected to activate disgust as an emotional response, is responsible for a wide range of unusual occurrences and behaviors. Even the detection of a culturally

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<sup>1</sup> For a review of the effect of mortality salience on various constructs, such as prejudice, intergroup conflict, and political attitudes, see Burke et al. (2010).

unorthodox behavior, that is, the tendency to act in ways that violate local cultural norms, can also activate the disease avoidance system (Faulkner et al., 2004). Therefore, these psychological reactions are also expected to have an impact on public policy. For example, someone who feels disgusted with homosexuals tends to oppose to their rights as well (Cottrell et al., 2010).

### ***Threat and Prejudice***

The theoretical ground of the behavioral immune system derives from the evolutionary approach, which suggests that prejudices, stereotypes and acts of behavioral discrimination are contemporary products of threat-management mechanisms (Neuberg & Schaller, 2016). The behavioral immune system promotes disease avoidance, but occasionally seems to stigmatize targets who are not legitimate sources of disease (Kurzban & Leary, 2001).

Huang et al. (2011) found that when threatened with disease, participants who were vaccinated against the disease exhibited less prejudice toward immigrants than did the unvaccinated participants. Their results also seem to demonstrate that perceived protection from disease eliminated the relationship between chronic germ aversion and prejudice. Finally, they suggest that interventions against disease can change perceptions of out-group members and, therefore, support that, if the threat of contagion can be eliminated by public-health interventions, discrimination responses will also be mitigated.

Many more research data come to support the link between the behavioral immune system and social attitudes. Zakrzewska et al. (2019) found that body odor disgust sensitivity is associated with higher levels of prejudice; this association seems to be mediated by perceived dissimilarity in hygiene. Duncan and Schaller (2009) also found that when people feel vulnerable to infectious disease, they tend to express prejudicial attitudes toward older adults. Navarrete and Fessler (2006) also provide us with evidence that ethnocentrism increases as a function of perceived disease vulnerability. Therefore, on the basis of existing evidence, one would justifiably expect the threat of COVID-19 to lead to an overgeneralized prejudice toward not only foreigners, but seemingly disobedient groups as well.

However, in a broader context of terror management theory, a significant part of existing research suggests that differences in worldviews, especially those emphasizing the value of tolerance, can moderate the extent to which mortality salience motivates derogation of out-groups, by either neutralizing this effect (e.g., Greenberg et al., 1992; Pyszczynski et al., 2006) or even reversing it (Weise et al., 2012). Therefore, if we consider the threat of disease as a reminder of death, taking into account prior attitudes and worldviews in order to predict prejudicial reactions seems meaningful.

### ***The present study***

A few weeks before the first detection of the SARS-CoV-2 virus, data collection concerning the moderating role of authoritarianism on the relationship between different types of threat and prejudice had been completed. The COVID-19 pandemic was an opportunity to test the hypothesis that threat salience causes the embracing of higher levels of authoritarianism, as well as the hypothesis that the behavioral immune system can induce overgeneralized prejudice toward targets which are not accountable for spreading or causing the disease.

However, the main aim of the study was not just to validate the above sufficiently established assumptions, but also to examine the hypothesis that cultural conservatism, which can be considered to some extent as an authoritarian disposition, interacts with threat in causing the adoption of higher levels of authoritarianism and prejudice.

### ***Hypotheses***

Authoritarianism and prejudice are expected to be high among the less liberal participants, under conditions of threat, whereas no significant differences are expected for the liberals.

## Method

### *Design and participants*

There was a total of 424 participants, 82 of which coming from a recent study that took place shortly before the outbreak of the pandemic and they serve as a reference group, regarding the authoritarianism measures. The rest of the participants were recruited during three pandemic phases as following: 85 during the first weeks of the pandemic, 131 during the lockdown and 126 during the lifting of the lockdown measures. It is noticed that the first two phases feature the threat element, which is escalating while proceeding from the first to the second one, and the third phase, the measures lifting, marks the “back to normality” notion.

Thereby, four modalities of the independent variable emerged, based on which we examine the hypothesis of the rise of authoritarianism levels under conditions of salience of disease threat. The main goal is to compare the pre-pandemic period with each one of the three pandemic phases.

However, within the context of studying the outcomes of threat on the ideological level, it was considered essential to compare the levels of prejudice toward immigrants between the three phases of the pandemic<sup>2</sup>. Therefore, the phase of the pandemic was set as a second independent variable with the three modalities, as mentioned above.

### *Measures*

**Cultural liberalism.** The questionnaire consists of 8 items measuring attitudes towards the importance of climate change, the safety of consumption of genetically modified food, social acceptance of homosexuality, recreational drug use, immigration, the expanded use of nuclear power, homosexual couples' rights in adoption and organ donation after sudden death. The above topics were selected because they refer to current stakes and social debates in terms of cultural values, and they reflect a cluster of interdependent attitudes that are organized around the theme of conservatism-liberalism. Items are rated on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) (e.g., “To what extent do you agree with the view that society should accept homosexuality?”). Reliability analysis, in terms of internal consistency, showed that only 5 items had adequate item-total correlations and resulted in acceptable Cronbach's alpha coefficient ( $\alpha = .692$ ). Therefore, the final measure consists of 5 items measuring attitudes towards climate change, the acceptance of homosexuality, immigration, homosexuals' rights in adoption and organ donation. The excluded 3 items, referring to the safety of consumption of genetically modified food, recreational drug use, and the expanded use of nuclear power, are used as covariates.

**Right-Wing Authoritarianism.** In order to measure Right-Wing Authoritarianism, we used the ACT scale (Authoritarianism– Conservatism – Traditionalism scale; Duckitt et al., 2010) which consists of 36 items ( $\alpha = .931$ ) rated on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree), and includes the dimensions of Conservatism (12 items,  $\alpha = .861$ ) (e.g., “Our country will be great if we show respect for authority and obey our leaders”), Traditionalism (12 items,  $\alpha = .850$ ) (e.g., “It is important that we preserve our traditional values and moral standards”) and Authoritarianism (“Authoritarian aggression”) (12 items,  $\alpha = .895$ ) (e.g., “We should smash all the negative elements that are causing trouble in our society”).

**Prejudice.** In order to measure Prejudice, we used the Classical and Modern Racial Prejudice Scale, by Akrami et al. (2000), which consists of 16 items rated on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree) ( $\alpha = .880$ ). Seven<sup>3</sup> items refer to Classical racial prejudice ( $\alpha = .775$ ) (e.g., “Immigrants

<sup>2</sup> We compared prejudice levels only between the pandemic phases, as in the study which was conducted before the pandemic, prejudice was measured after experimental manipulation.

<sup>3</sup> A question from the initial scale regarding the migrant camps, which is included in the dimension of Classical racial prejudice, was excluded.

do not take care of their personal hygiene”), and nine items refer to Modern racial prejudice ( $\alpha = .837$ ) (e.g., “Immigrants are getting too demanding in the push for equal rights”).

## Results

For data analysis, we utilized PROCESS macro version 3.00 for SPSS and, in particular, Model 1, in order to test our moderation hypotheses. We set 95% confidence intervals, 10000 bootstrap samples, while the moderator values were +/- 1 SD from the mean. The +1 SD from the mean moderator value represents the liberal group of participants, while the -1 SD from the mean moderator value represents the less liberal group of participants. Therefore, our model included either the multicategorical independent variable with the four modalities (the pre-pandemic period and the three phases of the pandemic) when testing Right-Wing Authoritarianism levels, or the multicategorical independent variable with the three modalities (the three phases of the pandemic) when testing Prejudice levels, as well as Cultural liberalism as the moderating variable. It is worth mentioning that bias check was carried out and no difference was found between the time phases, in terms of Cultural liberalism,  $F(3, 423) = .19, p = .91$ , (see Table 1 for mean scores and standard deviations).

**Table 1**

*Means and Standard Deviations of Cultural Liberalism*

	Pre-pandemic period ( <i>N</i> = 82)		The first weeks ( <i>N</i> = 85)		The lockdown ( <i>N</i> = 131)		The lifting of lockdown measures ( <i>N</i> = 126)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Cultural liberalism	5.61	1.00	5.73	1.06	5.67	1.08	5.67	1.05

### *Right-Wing Authoritarianism*

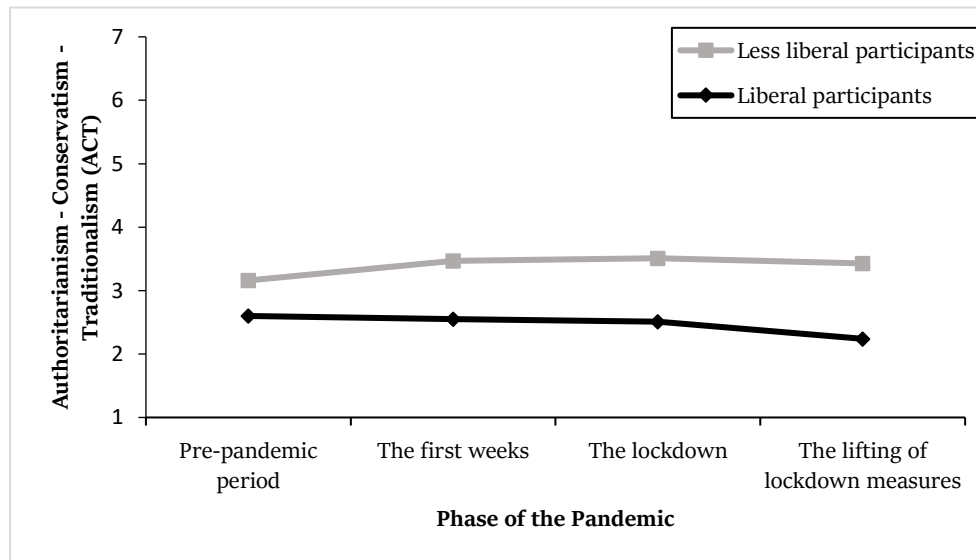
Right-Wing Authoritarianism levels for each phase of the pandemic were compared to the pre-pandemic levels, taking into account the moderating role of Cultural liberalism. Both the total Right-Wing Authoritarianism and every single dimension were compared separately. The results are shown below, except from Authoritarian aggression, for which no significant differences were found.

Regarding the total Authoritarianism – Conservatism – Traditionalism indicator (ACT), moderation analysis showed a significant increase during the second and the third phase of the pandemic,  $b = 1.33, SE = .52, 95\% CI = [.31, 2.36], t(424) = 2.55, p < .05$  and  $b = 1.64, SE = .53, 95\% CI = [.59, 2.68], t(424) = 3.08, p < .01$  respectively; there is an upward trend during the first weeks as well,  $b = 1.12, SE = .58, 95\% CI = [-.02, 2.25], t(424) = 1.93, p = .06$ . However, this increase is in particular expressed by less liberal participants,  $b = .31, SE = .15, 95\% CI = [.02, .60], t(424) = 2.13, p < .05, b = .35, SE = .13, 95\% CI = [.09, .61], t(424) = 2.69, p < .01$  and  $b = .27, SE = .13, 95\% CI = [.01, .53], t(424) = 2.01, p < .05$ , for the first, the second and the third phase respectively. On the contrary, when it comes to liberals, whereas there is *no* significant difference during the first two phases,  $b = -.05, SE = .15, 95\% CI = [-.34, .24], t(424) = -.35, p = .73$  and  $b = -.09, SE = .14, 95\% CI = [-.36, .18], t(424) = -.67, p = .50$ , they express significantly *reduced* levels of ACT during the phase of lifting the lockdown measures,  $b = -.36, SE = .14, 95\% CI = [-.63, -.08], t(424) = -2.56, p < .05$  (see Table 2 and Figure 1).



**Table 2**  
*Means of all Dependent Variables*

	Pre-pandemic period			The first weeks			The lockdown			The lifting of lockdown measures		
	Less liberals	Liberals	Total	Less liberals	Liberals	Total	Less liberals	Liberals	Total	Less liberals	Liberals	Total
ACT	3.16	2.60	2.92	3.47	2.55	3.00	3.51	2.51	3.00	3.43	2.24	2.81
Conservatism	2.67	2.55	2.64	3.09	2.44	2.77	3.19	2.36	2.77	2.89	2.13	2.48
Traditionalism	2.98	2.23	2.65	3.29	2.26	2.76	3.36	2.17	2.76	3.51	2.06	2.77
Prejudice	-	-	-	3.33	2.14	2.71	3.45	2.27	2.87	3.89	2.22	3.06
Classical racial prejudice	-	-	-	3.04	2.11	2.55	3.42	2.42	2.94	4.05	2.64	3.55
Modern racial prejudice	-	-	-	3.56	2.16	2.83	3.47	2.15	2.82	3.76	1.89	2.84

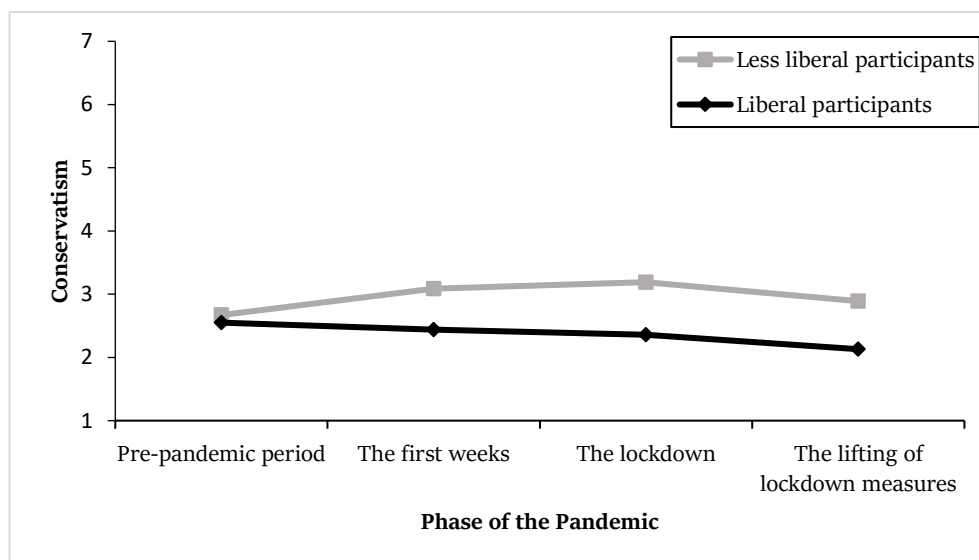


**Figure 1.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Authoritarianism – Conservatism – Traditionalism (ACT) as the Dependent Variable



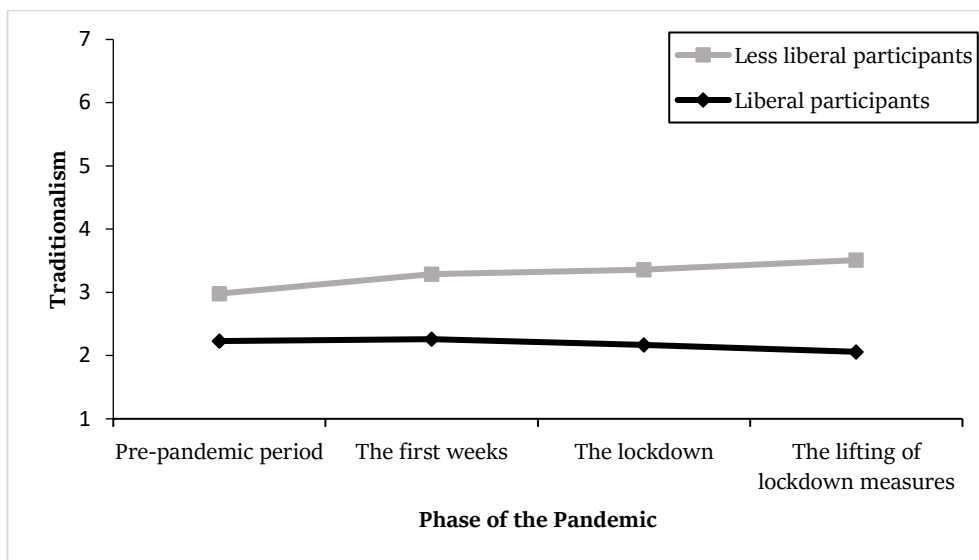


**Conservatism.** Testing each dimension of Right-Wing Authoritarianism separately, a significant increase in Conservatism was found in all three pandemic phases, compared to the pre-pandemic levels,  $b = 1.60$ ,  $SE = .73$ ,  $95\% CI = [.17, 3.02]$ ,  $t(424) = 2.20$ ,  $p < .05$ ,  $b = 2.11$ ,  $SE = .66$ ,  $95\% CI = [.82, 3.39]$ ,  $t(424) = 3.21$ ,  $p < .01$  and  $b = 1.63$ ,  $SE = .67$ ,  $95\% CI = [.32, 2.95]$ ,  $t(424) = 2.45$ ,  $p < .05$ , for the first, the second and the third phase respectively. It is essential to consider the interaction between Cultural liberalism and the phases of the pandemic. In particular, less liberal individuals appear to score significantly higher in Conservatism during the first and the second phase of the pandemic, which are the first weeks and the lockdown period,  $b = .42$ ,  $SE = .18$ ,  $95\% CI = [.06, .79]$ ,  $t(424) = 2.28$ ,  $p < .05$  and  $b = .52$ ,  $SE = .17$ ,  $95\% CI = [.20, .85]$ ,  $t(424) = 3.16$ ,  $p < .01$  respectively, although the values seem to get back to their pre-pandemic levels during the phase of lifting the lockdown measures,  $b = .22$ ,  $SE = .17$ ,  $95\% CI = [-.11, .55]$ ,  $t(424) = 1.32$ ,  $p = .19$ . On the contrary, when it comes to liberals, while Conservatism levels do not show significant changes during the first and the second phase of the pandemic,  $b = -.11$ ,  $SE = .19$ ,  $95\% CI = [-.48, .25]$ ,  $t(424) = -.61$ ,  $p = .54$  and  $b = -.20$ ,  $SE = .17$ ,  $95\% CI = [-.54, .14]$ ,  $t(424) = -1.16$ ,  $p = .25$  respectively, they appear significantly lower during the third, lifting of lockdown measures, phase, in comparison with the pre-pandemic levels,  $b = -.42$ ,  $SE = .17$ ,  $95\% CI = [-.76, -.08]$ ,  $t(424) = -2.41$ ,  $p < .05$  (see Table 2 and Figure 2).



**Figure 2.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Conservatism as the Dependent Variable

**Traditionalism.** Traditionalism is increased during the lockdown phase, as well as the lifting of measures phase, compared to the pre-pandemic period,  $b = 1.36$ ,  $SE = .55$ ,  $95\% CI = [.27, 2.44]$ ,  $t(424) = 2.46$ ,  $p < .05$  and  $b = 2.07$ ,  $SE = .56$ ,  $95\% CI = [.97, 3.17]$ ,  $t(424) = 3.69$ ,  $p < .01$  respectively. This rise is noticed among the less liberal participants, in particular, who express significantly higher levels of Traditionalism even during the first weeks of the pandemic,  $b = .31$ ,  $SE = .16$ ,  $95\% CI = [.00, .62]$ ,  $t(424) = 1.99$ ,  $p < .05$ ,  $b = .38$ ,  $SE = .14$ ,  $95\% CI = [.11, .66]$ ,  $t(424) = 2.76$ ,  $p < .01$  and  $b = .53$ ,  $SE = .14$ ,  $95\% CI = [.25, .81]$ ,  $t(424) = 3.75$ ,  $p < .001$ , for the first, the second and the third phase respectively (see Table 2 and Figure 3).



**Figure 3.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Traditionalism as the Dependent Variable

### Prejudice

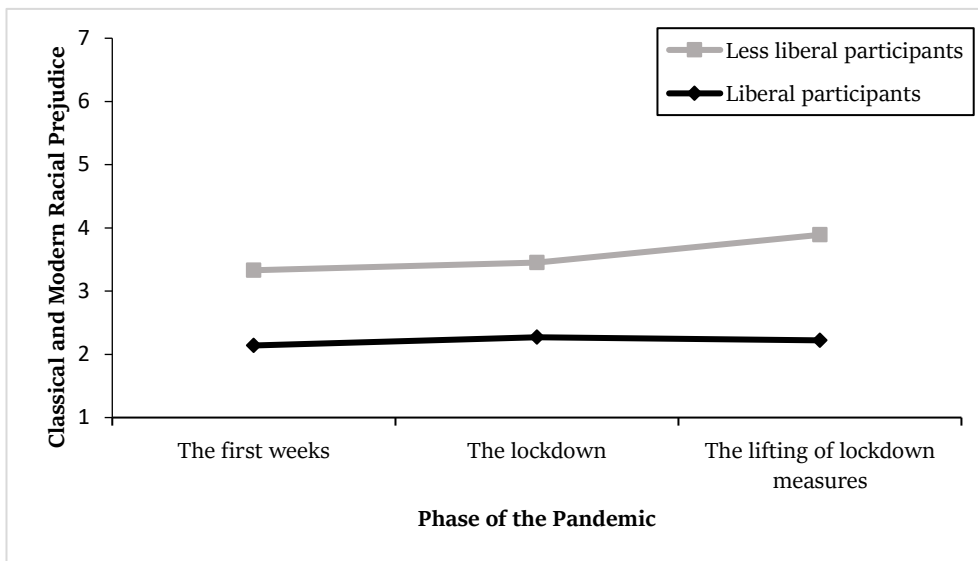
In order to compare Prejudice levels among the three phases of the pandemic, we utilized Helmert coding<sup>4</sup>, setting Cultural liberalism as a moderating variable. The comparisons were made regarding both the total Classical and Modern Racial Prejudice indicator and each dimension separately.

Regarding overall Prejudice, it appears to be expressed in higher levels during the lifting of measures phase in comparison with the two first phases taken together,  $b = 1.50$ ,  $SE = .46$ ,  $95\% CI = [.60, 2.40]$ ,  $t(342) = 3.26$ ,  $p < .01$ . However, this rise is mostly detected among less liberal participants,  $b = .44$ ,  $SE = .12$ ,  $95\% CI = [.20, .67]$ ,  $t(342) = 3.66$ ,  $p < .001$ , who appear to have already expressed significantly higher levels of Prejudice during the lockdown phase compared to the first weeks of the pandemic,  $b = .34$ ,  $SE = .12$ ,  $95\% CI = [.09, .58]$ ,  $t(342) = 2.74$ ,  $p < .01$  (see Table 2 and Figure 4).

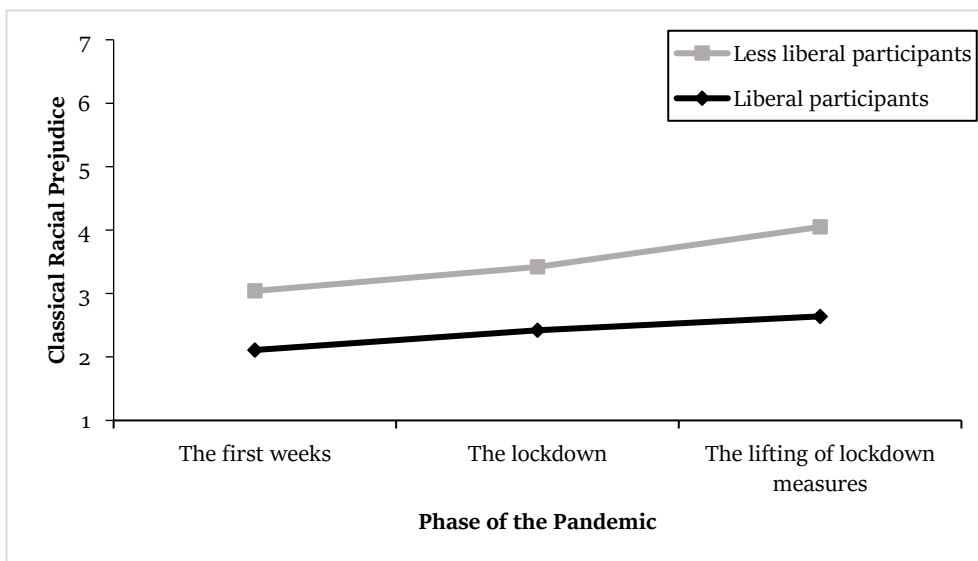
**Classical racial prejudice.** About Classical racial prejudice, a progressive increase is observed from the first weeks up to the lifting of the lockdown measures, as evident in the increase during the lockdown compared to the previous weeks,  $b = 1.29$ ,  $SE = .55$ ,  $95\% CI = [.22, 2.37]$ ,  $t(342) = 2.37$ ,  $p < .05$ , whereas a further significant increase is observed when the lockdown measures are lifted,  $b = 1.53$ ,  $SE = .54$ ,  $95\% CI = [.47, 2.59]$ ,  $t(342) = 2.84$ ,  $p < .01$ . That kind of progressive increase of Classical racial prejudice mainly regards the less liberal participants,  $b = .70$ ,  $SE = .14$ ,  $95\% CI = [.42, .98]$ ,  $t(342) = 4.88$ ,  $p < .001$  and  $b = .63$ ,  $SE = .14$ ,  $95\% CI = [.36, .91]$ ,  $t(342) = 4.52$ ,  $p < .001$ , for the lockdown and the lifting of measures phase respectively. Meanwhile, liberal individuals score higher during the second and third phase taken together, compared to the first weeks of the pandemic,  $b = .43$ ,  $SE = .14$ ,  $95\% CI = [.15, .70]$ ,  $t(342) = 3.07$ ,  $p < .01$  (see Table 2 and Figure 5).

**Modern racial prejudice.** Regarding Modern racial prejudice, a significant increase is noted during the third phase compared to the first and second phase taken together,  $b = 1.48$ ,  $SE = .54$ ,  $95\% CI = [.41, 2.54]$ ,  $t(342) = 2.73$ ,  $p < .01$ , which is in particular found among the less liberal individuals,  $b = .28$ ,  $SE = .14$ ,  $95\% CI = [.01, .56]$ ,  $t(342) = 2.02$ ,  $p < .05$  (see Table 2 and Figure 6).

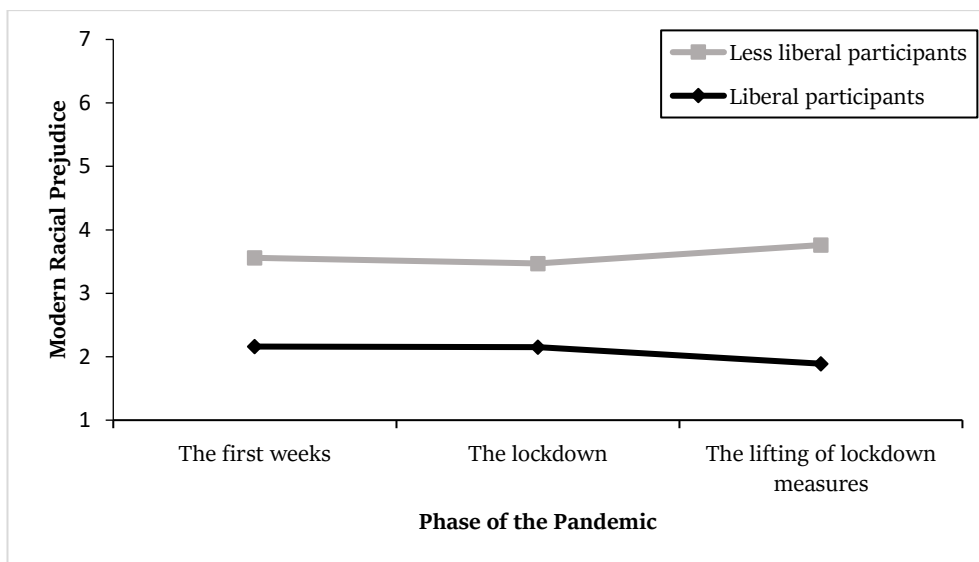
<sup>4</sup> Regarding Right-Wing Authoritarianism, for which indicator coding was used, each one of the three pandemic phases was compared to the levels of reference, that are the pre-pandemic levels. As of Prejudice, the comparisons were made *between* the phases of the pandemic. Therefore, Helmert coding was used, as it “generates regression coefficients quantifying the difference between means for one group and all groups ordinaly higher on the multicategorical ordinal variable” (Hayes & Montoya, 2017, p. 5).



**Figure 4.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Classical and Modern Racial Prejudice as the Dependent Variable



**Figure 5.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Classical Racial Prejudice as the Dependent Variable



**Figure 6.** Interaction Between Cultural Liberalism and Phase of the Pandemic With Modern Racial Prejudice as the Dependent Variable

## Discussion

### General

Right-wing authoritarianism has been characterized as a disease avoidance mechanism, as it discourages us from being exposed to unfamiliar stimuli and thus to pathogenic threats (Terrizzi et al., 2013). Research has also shown that nations with greater parasite stress, as well as people who intensively tend to avoid pathogens, are more conservative in political terms (Tybur et al., 2016). Additionally, prejudice and xenophobia are likely to occur among people who perceive themselves to be vulnerable to infection (e.g., Fessler et al., 2005; Faulkner et al., 2004). However, the ways in which the threat of disease affects such stable ideological attitudes has not been clarified.

Results of the present study showed that the salience of the disease threat definitely plays a decisive role in increasing the levels of authoritarianism. The most important finding, however, is that cultural liberalism, as a predisposing factor, clearly moderates this association. We could argue that the adoption of authoritarianism seems indeed to be a mechanism for managing the threat of disease. This mechanism, however, does not seem to apply for all individuals, as the more liberal participants tend to express reduced levels of authoritarianism, thus implying a completely different way of managing the threat of disease.

In addition, the importance of distinguishing the dimensions of authoritarianism is once again apparent. In particular, conservatism seems to be the central dimension, in terms of exhibiting increased or decreased authoritarian levels in the context of threat management. In contrast, authoritarian aggression did not show any statistically significant difference, despite the fact that authorities placed particular emphasis on restricting individual freedoms from the beginning of the pandemic. Thus, notwithstanding the calls both from the authorities and the media for the discipline of citizens, often accusing certain social groups, such as youth, of irresponsibility, the results of the present study do not reflect the increase in authoritarian aggression that one would expect.<sup>5</sup>

<sup>5</sup> It is important to mention at this point that, at least as far as Greece is concerned, a disproportionate emphasis was placed on individual responsibility at the expense of state responsibility concerning the strengthening of the national health system.

Regarding prejudice, the results are consistent with our hypotheses, as there is a progressive increase during the pandemic phases among the less liberal participants. However, some particularly interesting findings emerged. First, in terms of classical racial prejudice, during the lockdown and the lifting of lockdown measures phases combined, we observed an increase compared to the first weeks, even among the liberal participants. This finding could be due to the fact that, at least in Greece, responsibilities for spreading the virus were once again being blamed to a significant extent to refugees and immigrants, while the media systematically characterized the migrant camps as “health bombs”.

Secondly, we observed that during the lifting of lockdown measures –a phase which marks to some extent the return to normality and, consequently, a de-escalation of the disease threat– the levels of prejudice remained high or, at least, did not show any decrease. On the contrary, when comparing the levels of authoritarianism, a decrease was found among the liberals during the third phase of the pandemic, whereas in the case of conservatism, even the less liberal participants seemed to have returned to the pre-pandemic levels. This finding could question to some extent the interaction model assumption that threat activates prejudicial attitudes, as a consequence of authoritarianism (Feldman, 2013).

## Limitations

The present study has two main limitations. First, the variables were measured between- and not within-subjects. Although longitudinal data would be –methodologically speaking– ideal, it would not be possible to predict the forthcoming pandemic, when we were measuring right-wing authoritarianism a few months earlier. However, we believe that the pre-test, as well as bias checks, made the groups counterbalanced and thus comparable. The second and most important limitation is that there is no measure of threat, although there are considerable reasons to presume the salience of threat during the first weeks of the pandemic and the lockdown.

## Conclusion

The hypothesis that a conservative disposition is necessary in order for someone to adopt higher authoritarianism levels as a mechanism for managing the threat of disease, seems to be confirmed by our data. Additionally, a crucial methodological and theoretical need was highlighted, that of the distinction between authoritarianism itself and other discrimination attitudes, such as prejudice. Authoritarianism refers to promoting group cohesion, adhering to conventional norms and submitting to authority. Prejudice as well as right-wing ideology are inherently associated with authoritarianism, nevertheless they are not the same case. According to Žuk and Žuk (2020), the growing anti-vaccine movements and right-wing populism have a lot in common: they found that opponents of vaccines in Poland refer to nationalist slogans and have an aversion to the European Union. In addition, they supported the view that the rejection of vaccines is another manifestation of the conspiracy ideologies of right-wing populists. This phenomenon could seem consistent to the ethnocentric orientation that characterizes right-wing authoritarianism, although a theoretical and practical concern arises: when the authorities impose strict restrictive measures and health policies, why should a right-wing populist oppose to them?

In addition, the correlation between anti-vaccine movements and right-wing populism could question findings suggesting that public-health interventions, such as vaccination, could eliminate discrimination responses. Huang et al. (2011) found that unvaccinated participants exhibited more prejudice toward immigrants than vaccinated participants, an effect that could be mediated by vaccine hesitancy. Therefore, the aim and the final outcome of the present research was to emphasize the fact that, in terms of the disease threat, its effects on the ideological level are significantly moderated by the ideological predisposition.

## References

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. Harper & Row.
- Agamben, G. (2020). *Μόλυνση, επιδημία, κατάσταση εξαίρεσης* [Infection, epidemic, state of exception]. Παρέγκλισις [Pareglisis].
- Akrami, N., Ekehammar, B., & Araya, T. (2000). Classical and modern racial prejudice: A study of attitudes toward immigrants in Sweden. *European Journal of Social Psychology*, 30(4), 521-532. [https://doi.org/10.1002/1099-0992\(200007/08\)30:4<521::AID-EJSP5>3.0.CO;2-N](https://doi.org/10.1002/1099-0992(200007/08)30:4<521::AID-EJSP5>3.0.CO;2-N)
- Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.
- Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba Press.
- Altemeyer, B. (1996). *The authoritarian specter*. Harvard University Press.
- Burke, B. L., Martens, A., & Faucher, E. H. (2010). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review*, 14(2), 155-195. <https://doi.org/10.1177/1088868309352321>
- Carlisle, R. P. (Ed.). (2005). *Encyclopedia of politics: The left and the right* (Vols. 1-2). Sage. <https://www.doi.org/10.4135/9781412952408>
- Cohrs, J. C., & Ibler, S. (2009). Authoritarianism, threat, and prejudice: An analysis of mediation and moderation. *Basic and Applied Social Psychology*, 31(1), 81-94. <https://doi.org/10.1080/01973530802659638>
- Cottrell, C. A., Richards, D. A. R., & Nichols, A. L. (2010). Predicting policy attitudes from general prejudice versus specific intergroup emotions. *Journal of Experimental Social Psychology*, 46(2), 247-254. <https://doi.org/10.1016/j.jesp.2009.10.008>
- Doty, R. M., Peterson, B. E., & Winter, D. G. (1991). Threat and authoritarianism in the United States, 1978-1987. *Journal of Personality and Social Psychology*, 61(4), 629-640. <https://doi.org/10.1037/0022-3514.61.4.629>
- Duckitt, J. (1989). Authoritarianism and group identification: A new view of an old construct. *Political Psychology*, 10(1), 63-84. <https://doi.org/10.2307/3791588>
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology*. Vol. 33 (pp. 41-113). Academic Press. [https://doi.org/10.1016/S0065-2601\(01\)80004-6](https://doi.org/10.1016/S0065-2601(01)80004-6)
- Duckitt, J. (2013). Introduction to the special section on authoritarianism in societal context: The role of threat. *International Journal of Psychology*, 48(1), 1-5. <https://doi.org/10.1080/00207594.2012.738298>
- Duckitt, J., Bizumic, B., Krauss, S. W., & Heled, E. (2010). A tripartite approach to right-wing authoritarianism: The authoritarianism-conservatism-traditionalism model. *Political Psychology*, 31(5), 685-715. <https://doi.org/10.1111/j.1467-9221.2010.00781.x>
- Duncan, L. A., & Schaller, M. (2009). Prejudicial attitudes toward older adults may be exaggerated when people feel vulnerable to infectious disease: Evidence and implications. *Analyses of Social Issues and Public Policy*, 9(1), 97-115. <https://doi.org/10.1111/j.1530-2415.2009.01188.x>
- Eagly, A. H., & Chaiken, S. (1998). Attitude structure and function. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 269-322). McGraw-Hill.
- Faulkner, J., Schaller, M., Park, J. H., & Duncan, L. A. (2004). Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. *Group Processes & Intergroup Relations*, 7(4), 333-353. <https://doi.org/10.1177/1368430204046142>
- Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology*, 24(1), 41-74. <https://doi.org/10.1111/0162-895X.00316>
- Feldman, S. (2013). Comments on authoritarianism in social context: The role of threat. *International Journal of Psychology*, 48(1), 55-59. <https://doi.org/10.1080/00207594.2012.742196>

- Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology, 18*(4), 741–770. <https://doi.org/10.1111/0162-895X.00077>
- Fessler, D. M. T., Eng, S. J., & Navarrete, C. D. (2005). Elevated disgust sensitivity in the first trimester of pregnancy: Evidence supporting the compensatory prophylaxis hypothesis. *Evolution and Human Behavior, 26*(4), 344–351. <https://doi.org/10.1016/j.evolhumbehav.2004.12.001>
- Florack, A., Piontkowski, U., Rohmann, A., Balzer, T., & Perzig, S. (2003). Perceived intergroup threat and attitudes of host community members toward immigrant acculturation. *Journal of Social Psychology, 143*(5), 633–648. <https://doi.org/10.1080/00224540309598468>
- Foucault, M. (2008). *The birth of biopolitics: Lectures at the Collège de France, 1978–1979*. Palgrave Macmillan.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of the need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189–212). Springer-Verlag. [https://doi.org/10.1007/978-1-4613-9564-5\\_10](https://doi.org/10.1007/978-1-4613-9564-5_10)
- Greenberg, J., Simon, L., Pyszczynski, T., Solomon, S., & Chatel, D. (1992). Terror management and tolerance: does mortality salience always intensify negative reactions to others who threaten one's worldview? *Journal of Personality and Social Psychology, 63*(2), 212–220. <https://doi.org/10.1037//0022-3514.63.2.212>
- Hastings, B. M., & Shaffer, B. (2008). Authoritarianism: The role of threat, evolutionary psychology, and the will to power. *Theory & Psychology, 18*(3), 423–440. <https://doi.org/10.1177/0959354308089793>
- Hayes, A. F., & Montoya, A. K. (2017). A tutorial on testing, visualizing, and probing an interaction involving a multicategorical variable in linear regression analysis. *Communication Methods and Measures, 11*(1), 1–30. <https://doi.org/10.1080/19312458.2016.1271116>
- Huang, J. Y., Sedlovskaya, A., Ackerman, J. M., & Bargh, J. A. (2011). Immunizing against prejudice. *Psychological Science, 22*(12), 1550–1556. <https://doi.org/10.1177/0956797611417261>
- Jacoby, W. G. (1995). The structure of ideological thinking in the American electorate. *American Journal of Political Science, 39*(2), 314–335. <https://doi.org/10.2307/2111615>
- Jacoby, W. G. (1995). The Structure of Ideological Thinking in the American Electorate. *American Journal of Political Science, 39*(2), 314–335. <https://doi.org/10.2307/2111615>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*(3), 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>
- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin, 127*(2), 187–208. <https://doi.org/10.1037/0033-2909.127.2.187>
- Navarrete, C. D., & Fessler, D. M. T. (2006). Disease avoidance and ethnocentrism: the effects of disease vulnerability and disgust sensitivity on intergroup attitudes. *Evolution and Human Behavior, 27*(4), 270–282. <https://doi.org/10.1016/j.evolhumbehav.2005.12.001>
- Neuberg, S. L., Kenrick, D. T., & Schaller, M. (2011). Human threat management systems: Self-protection and disease avoidance. *Neuroscience and Biobehavioral Reviews, 35*(4), 1042–1051. <https://doi.org/10.1016/j.neubiorev.2010.08.011>
- Neuberg, S. L., & Schaller, M. (2016). An evolutionary threat-management approach to prejudices. *Current Opinion in Psychology, 7*, 1–5. <https://doi.org/10.1016/j.copsyc.2015.06.004>
- Pyszczynski, T., Abdollahi, A., Solomon, S., Greenberg, J., Cohen, F., & Weise, D. (2006). Mortality salience, martyrdom, and military might: The great Satan versus the axis of evil. *Personality and Social Psychology Bulletin, 32*(4), 525–537. <https://doi.org/10.1177/0146167205282157>
- Rokeach, M. (1960). *The open and closed mind: Investigations into the nature of belief systems and personality systems*. Basic Books.
- Sales, S. M. (1973). Threat as a factor in authoritarianism: An analysis of archival data. *Journal of Personality and Social Psychology, 28*(1), 44–57. <https://doi.org/10.1037/h0035588>

- Schaller, M. (2011). The behavioural immune system and the psychology of human sociality. *Philosophical Transactions of the Royal Society, B: Biological Sciences*, 366(1583), 3418–3426. <https://doi.org/10.1098/rstb.2011.0029>
- Schaller, M., & Duncan, L. A. (2007). The behavioral immune system: Its evolution and social psychological implications. In J. P. Forgas, M. G. Haselton, & W. von Hippel (Eds.), *Evolution and the social mind: Evolutionary psychology and social cognition* (pp. 293–307). Psychology Press.
- Schaller, M., & Neuberg, S. L. (2008). Intergroup prejudices and intergroup conflicts. In C. Crawford & D. L. Krebs (Eds.), *Foundations of evolutionary psychology* (pp. 399–412). Lawrence Erlbaum Associates.
- Schaller, M., & Neuberg, S. L. (2012). Danger, disease, and the nature of prejudice(s). *Advances in Experimental Social Psychology*, 46, 1–54. <https://doi.org/10.1016/b978-0-12-394281-4.00001-5>
- Schaller, M., & Park, J. H. (2011). The behavioral immune system (and why it matters). *Current Directions in Psychological Science*, 20(2), 99–103. <https://doi.org/10.1177/0963721411402596>
- Sibley, C.G., Wilson, M., & Duckitt, J. (2007). Effects of dangerous and competitive worldviews on right wing authoritarianism and social dominance orientation over a five-month period. *Political Psychology*, 28(3), 357–371. <https://doi.org/10.1111/j.1467-9221.2007.00572.x>
- Terrizzi, J. A., Jr., Shook, N. J., & McDaniel, M. A. (2013). The behavioral immune system and social conservatism: A meta-analysis. *Evolution and Human Behavior*, 34(2), 99–108. <https://doi.org/10.1016/j.evolhumbehav.2012.10.003>
- Tybur, J. M., Inbar, Y., Aarøe, L., Barclay, P., Barlow, F. K., De Barra, M., Becker, D. V., Borovoi, L., Choi, I., Choi, J. A., Consedine, N. S., Conway, A., Conway, J. R., Conway, P., Adoric, V. C., Demirci, D. E., Fernández, A. M., Ferreira, D. C. S., Ishii, K. ... Žezelj, I. (2016). Parasite stress and pathogen avoidance relate to distinct dimensions of political ideology across 30 nations. *Proceedings of the National Academy of Sciences*, 113(44), 12408–12413. <https://doi.org/10.1073/pnas.1607398113>
- Weise, D. R., Arciszewski, T., Verliac, J.-F., Pyszczynski, T., & Greenberg, J. (2012). Terror management and attitudes toward immigrants: Differential effects of mortality salience for low and high right-wing authoritarians. *European Psychologist*, 17(1), 63–72. <https://doi.org/10.1027/1016-9040/a000056>
- Zakrzewska, M., Olofsson, J. K., Lindholm, T., Blomkvist, A., & Liuzza, M. T. (2019). Body odor disgust sensitivity is associated with prejudice towards a fictive group of immigrants. *Physiology & Behavior*, 201, 221–227. <https://doi.org/10.1016/j.physbeh.2019.01.006>
- Žuk, P., & Žuk, P. (2020). Right-wing populism in Poland and anti-vaccine myths on YouTube: Political and cultural threats to public health. *Global Public Health*, 15(6), 790–804. <https://doi.org/10.1080/17441692.2020.1718733>



# Αυταρχισμός, προκατάληψη και COVID-19: ο ρυθμιστικός ρόλος του πολιτισμικού φιλελευθερισμού

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απειλή,  
COVID-19,  
δεξιόστροφος αυταρχισμός,  
ιδεολογικό επίπεδο,  
πολιτισμικός φιλελευθερισμός,  
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## ΠΕΡΙΛΗΨΗ

Η πανδημία COVID-19 έχει θέσει μια τεράστια πρόκληση σε ιατρικό, οικονομικό και πολιτικό επίπεδο τους τελευταίους μήνες. Η απειλή της ασθένειας, οι περισσότεροι ή λιγότεροι αυταρχικές βιοπολιτικές των κρατών, η έννοια της κοινωνικής απόστασης, υπαγορεύουν τη διερεύνηση των συνεπειών της πανδημίας σε ιδεολογικό επίπεδο. Χρησιμοποιώντας τα δεδομένα που προέκυψαν από μια έρευνα που διεξήχθη πριν την πανδημία ( $N = 82$ ) ως σημείο αναφοράς, ο στόχος της παρούσας μελέτης ήταν να ελέγξει εμπειρικά την υπόθεση ότι ο δεξιόστροφος αυταρχισμός (Αυταρχισμός - Συντηρητισμός - Παραδοσιακρατία; ACT; Duckitt et al., 2010) αυξάνεται υπό συνθήκες απειλής (Adorno et al., 1950; Sales, 1973). Παράλληλα, διερευνάται ο πιθανός ρυθμιστικός ρόλος του πολιτισμικού φιλελευθερισμού. Επιπλέον, εξετάζεται η υπόθεση ότι η απειλή προβλέπει την προκατάληψη, όπως μας υποδεικνύουν σχετικά ευρήματα (π.χ. Florack et al., 2003). Πραγματοποιήθηκε συλλογή δεδομένων κατά τις εξής τρεις φάσεις της πανδημίας στην Ελλάδα: τις πρώτες εβδομάδες ( $N = 85$ ), την απαγόρευση κυκλοφορίας ( $N = 131$ ) και την άρση των περιοριστικών μέτρων ( $N = 126$ ). Οι υποθέσεις επιβεβαιώθηκαν: υπήρξε αύξηση του Συντηρητισμού και της Παραδοσιακρατίας, ιδίως μεταξύ των λιγότερο φιλελεύθερων συμμετεχόντων, ενώ οι φιλελεύθεροι φαίνεται να εκφράζουν μειωμένα επίπεδα δεξιόστροφου αυταρχισμού κατά την άρση των περιοριστικών μέτρων σε σύγκριση με την προ COVID-19 περίοδο. Βρέθηκε, επίσης, μια βαθμιαία έκφραση προκατάληψης, με τον πολιτισμικό φιλελευθερισμό να παίζει έναν περιορισμένο, αλλά και πάλι ρυθμιστικό ρόλο. Συζητούνται οι επιπτώσεις της πανδημίας στο ιδεολογικό επίπεδο.